

What is claimed is:

1. A receiver structure for receiving a test adapter having external locating portions comprising:
  - a generally rectangular frame having left and right inwardly facing surfaces;
  - left and right cam plates slidingly mounted adjacent to the left and right inwardly facing surfaces of the generally rectangular frame, each of the left and right cam plates including a cam slot;
  - a lever assembly including a user accessible lever portion, the lever assembly being arranged in a driving relationship with the left and right cam plates; and
  - two or more hanger structures, one of the hanger structures being mounted adjacent to each of the left and right cam plates for sliding movement between an outwardly projecting position and a retracted position, the hanger structures each including a guide slot.
2. The receiver structure of claim 1, wherein portions of the guide slots are aligned with portions of the cam slots of the adjacent left and right cam plates, such that the hanger structures may be driven between the outwardly projecting position and the retracted position by the movement of the cam plates when the hanger slots and cam slots co-engage the external locating portions of the test adapter.
3. The receiver structure of claim 2, further comprising two or more hanger slide retainers, each of the hanger slide retainers including:
  - a channel constructed and arranged to accommodate one of the hanger structures;
  - and
  - movement stops.
4. The receiver of claim 3, wherein each of the hanger structures further comprises guide rails on upper and lower surfaces thereof.
5. The receiver of claim 4, wherein the hanger slide retainers are constructed and adapted to be mounted within the generally rectangular frame so as to define portions of the left and right inwardly facing surfaces, respectively.

6. The receiver of claim 5, wherein the movement stops of the hanger slide retainers comprise ends of the channels within the hangar structures.
7. The receiver of claim 6, wherein the hanger structures are constructed and arranged to be received for sliding movement within the channels of the hanger slide retainers.
8. The receiver of claim 7, wherein the outwardly projecting position of the hanger structures comprises the position in which the movement stops of the hanger slide retainers contact the guide rails of the hanger structures.
9. The receiver of claim 8, wherein each of the hanger structures further comprises receiving structures.
10. The receiver of claim 9, wherein resilient members are mounted between the generally rectangular frame and the hanger structures so as to be at least partially received within the receiving structures of the hanger structures, the resilient members being constructed and arranged to bias the hanger structures toward the outwardly projecting position.
11. The receiver of claim 10, wherein the resilient members are springs.
12. The receiver of claim 10, wherein the receiving structures are counterbored holes.
13. The receiver of claim 1, wherein the guide slot is generally downwardly sloped.
14. The receiver of claim 13, wherein the guide slot is generally straight.
15. The receiver of claim 14, wherein the guide slot includes an upwardly angled end surface.
16. The receiver of claim 1, wherein the hanger structures are formed of a metal.
17. The receiver of claim 16, wherein the metal is steel.
18. The receiver of claim 1, wherein two hanger structures are provided.

19. A testing apparatus comprising:

a receiver, including

a generally rectangular receiver frame having left and right inwardly facing surfaces, interior portions of the generally rectangular receiver frame being constructed and arranged to carry electrical contacts;

left and right cam plates slidingly mounted adjacent to the left and right inwardly facing surfaces of the generally rectangular receiver frame, each of the left and right cam plates including a cam slot;

a lever assembly including a user accessible lever portion, the lever assembly being arranged in a driving relationship with the left and right cam plates; and

two or more hanger structures, one of the hanger structures being mounted adjacent to each of the left and right cam plates for sliding movement between an outwardly projecting position and a retracted position, each of the hanger structures including a guide slot; and

an interchangeable test adapter constructed and arranged to be received in the receiver, including

a generally rectangular interchangeable test adapter frame, interior portions of the generally rectangular interchangeable test adapter frame being constructed and arranged to carry electrical contacts; and

one or more rollers mounted on each of respective left and right exterior sides of the generally rectangular interchangeable test adapter frame.

20. The testing apparatus of claim 19, wherein portions of the guide slots are aligned with portions of the cam slots of the adjacent left and right cam plates, such that the hanger structures may be driven between the outwardly projecting position and the retracted position by the movement of the cam plates when the hanger slots and cam slots co-engage the rollers of the interchangeable test adapter.

21. The testing apparatus of claim 20, wherein the receiver further comprises two or more hanger slide retainers, each of the hanger slide retainers including:

a channel constructed and arranged to accommodate one of the hanger structures; and

movement stops.

22. The test apparatus of claim 21, wherein each of the hanger structures further comprises guide rails on upper and lower surfaces thereof.
23. The test apparatus of claim 22, wherein the hanger slide retainers are constructed and adapted to be mounted within the generally rectangular receiver frame so as to define portions of the left and right inwardly facing surfaces, respectively.
24. The test apparatus of claim 23, wherein the movement stops of the hanger slide retainers comprise ends of the channels within the hanger structures.
25. The test apparatus of claim 24, wherein the hanger structures are constructed and arranged to be received for sliding movement within the channels of the hanger slide retainers.
26. The test apparatus of claim 25, wherein the outwardly projecting position of the hanger structures comprises the position in which the movement stops of the hanger slide retainers contact the engaging portions of the hanger structures.
27. The test apparatus of claim 26, wherein each of the hanger structures further comprises receiving structures.
28. The test apparatus of claim 27, wherein resilient members are mounted between the generally rectangular receiver frame and the hanger structures so as to be at least partially received within the receiving structures of the hanger structures, the resilient members being constructed and arranged to bias the hanger structures toward the outwardly projecting position.
29. The test apparatus of claim 28, wherein the resilient members are springs.
30. The test apparatus of claim 28, wherein the receiving structures are counterbored holes.
31. The test apparatus of claim 19, wherein the guide slot is generally downwardly sloped.
32. The test apparatus of claim 31, wherein the guide slot is generally straight.

33. The test apparatus of claim 14, wherein the guide slot includes an upwardly angled end surface.
34. The test apparatus of claim 19, wherein the hanger structures are formed of a metal.
35. The test apparatus of claim 34, wherein the metal is steel.
36. The test apparatus of claim 19, wherein two hanger structures are provided.
37. A hanger assembly constructed and arranged to be mounted in a receiver, comprising:
  - a hanger structure including
    - a downwardly inclined slot having a depth equal to at least a portion of the thickness of the hanger structure;
    - outwardly extending guide rails on upper and lower surfaces of the hanger structure; and
    - receiving structures provided on a rear surface of the hanger structure, the receiving surfaces each being constructed and arranged to receive at least a portion of a resilient member; and
  - a hanger slide retaining member including
    - a hanger slide channel constructed and arranged to receive at least a portion of the outwardly extending guide rails of the hanger structure; and
    - movement stops.
38. The hanger assembly of claim 37, wherein at least one upper edge surface of the downwardly inclined slot includes an upwardly angled profile.
39. The hanger assembly of claim 37, wherein the hanger structure is mounted for sliding movement within the hanger slide channel such that the movement stops prevent the hanger structure from sliding out of the hanger slide retaining mechanism forwardly.
40. The hanger assembly of claim 39, wherein the receiving structures are counterbored holes.

41. The hanger assembly of claim 40, wherein the hanger structure is biased forwardly against the movement stops by the action of the stored energy members acting against the counterbored holes.

42. The hanger assembly of claim 41, wherein the hanger structure and hanger slide retainer are formed of a metal.

43. The hanger assembly of claim 42, wherein the metal is steel.

44. A method of engaging a receiver and an interchangeable test adapter, comprising:

resting interchangeable test adapter rollers on retractable hanger structures provided on the receiver; and

retracting the retractable hanger structures, thereby engaging the receiver and the interchangeable test adapter.